CLAIMS

We claim:

1. A method of producing a printing plate comprising

providing a thermal transfer film carrying a thermal transfer material in proximity to a surface of a printing plate carrier,

selectively ablating said thermal transfer material using a laser image-setting unit to apply structure information directly to the surface of said printing plate carrier, thereby forming a mask directly on said printing plate carrier, and

forming image points and non-image points directly on said printing plate carrier using said mask in order to produce a printing plate.

2. A method as in claim 1 wherein said printing plate is a gravure printing plate.

3. A method as in claim 2 wherein said mask is an etching mask which is applied to the surface of the printing plate carrier, said method further comprising etching gravure printing cells by applying acid where said thermal transfer material has been ablated.

4. A method as in claim 3 wherein said structure information is applied to a variable area of said surface with a constant thickness using an autotypical image-data process during ablation of said transfer material using said laser image setting unit.

5. A method as in claim 1 wherein said printing plate is a flexographic printing plate.

6. A method as in claim 5 wherein said printing plate carrier comprises a light sensitive coating which forms said surface, said mask being a copying mask which is applied to the surface of said carrier, said method further comprising exposing said light-sensitive coating through said mask by means of a copying lamp in order to form image points and non-image points on said light sensitive coating.

7. A method as in claim 6 wherein said copying mask is a positive copying mask.

8. A method as in claim 6 wherein said mask is a negative copying mask.

9. A method as in claim 1 wherein said printing plate is a screen-printing screen.

10. A method as in claim 9 wherein said mask is a copying mask.

11. A method as in claim 10 wherein said printing plate carrier comprises a network-like fabric structure which forms said surface, said fabric structure being coated throughout with a light sensitive material, said method comprising applying said copying mask to said fabric structure and exposing said light-sensitive coating through said mask by means of a copying lamp in order to form image points and non-image points on said light sensitive coating.

12. A method as in claim 10 wherein said copying mask is a positive mask.

13. A method as in claim 10 wherein said copying mask is a negative mask.

14. A method as in claim 9 wherein said mask is a screen-printing mask, said screen-printing screen being produced by electroplating.

15. A method as in claim 14 wherein said printing plate carrier has a metallic surface, said method comprising

applying said screen-printing mask to the surface of said printing plate carrier, said mask serving as a positive mask which insulates said surface, and

forming image points and non-image points directly on said printing plate carrier by exposing the non-insulated parts of said surface to an electrolyte.

16. A method as in claim 1 wherein said mask is formed in a printing machine, and said printing plate is produced by means of said mask in said printing machine.